REMARKS

Claims 1-17 are pending in this application. For purposes of expedition, claims 1, 4, 5, 6, 7, 9-11 and 13-15 have been amended in several particulars for purposes of clarity and brevity that are unrelated to patentability and prior art rejections while claims 16-17 have been newly added in accordance with current Office policy, to further and alternatively define Applicants' disclosed invention and to assist the Examiner to expedite compact prosecution of the instant application.

Claims 1, 3 and 12-15 have been allowed without the necessity of amendments. Claims 5, 6 and 8-11 have been conditionally allowed if rewritten in independent form to include all of the limitations of base claim 1. The Examiner's indication of allowability of these claims is noted with appreciation. For purposes of expedition, claims 5 and 6 have been rewritten in independent form to include all limitations of base claim 1 in order to place in condition for allowance. Claims 16-20 have been newly added to depend upon the now allowed base claims 2, 3, 5 and 6 in order to place in condition for allowance.

Lastly, claims 1, 4 and 7 have been rejected under 35 U.S.C. §102(e) as being anticipated by Ho, U.S. Patent No. 6,072,785 for reasons stated on pages 2-3 of the Office Action (Paper No. 6). For purposes of expedition, base claims 1 and 4 have been amended to further define that the plurality of transmission segments in a spread signal is generated on a time region. Specifically, base claims 1 and 4 define, *inter alia*: "a means for generating a spread signal including a plurality of transmission segments, by multiplying said primary modulated wave by a spread code repeatedly a plurality of times by changing the time region within a symbol

period." That is, a plurality of time segments is generated on the time region. As a result, the correlation value of noise entered into each segment during the transmission can be advantageously reduced.

In contrast to Applicants' base claims 1 and 4, Ho '785 discloses a typical CDMA system, as shown in FIG. 1 and FIG. 2, in which a plurality of DS/SS waves is generated by multiplying a primary modulated wave by the spread code repeatedly a plurality of times while changing the frequency range. In Ho '785, the DS/SS wave corresponding to one carrier equals to a segment. As a result, a plurality of segments is generated over the frequency range, which is completely different from that of Applicants' base claims 1 and 4, where a plurality of transmission segments is generated on the time region. In such a situation, the correlation value of noise entered into each segment during the transmission can be advantageously reduced.

For example, when the time overlapping for each segment is 1/2, if a "code 0" of "all 0/1 " of Walsh spread code is employed, the correlation value will be 0.5 or lower. However, if a code other than "0" is employed, the correlation value will be further reduced.

If the correlation value entered into each segment is "1", the phase difference given to the chip in the segment will be a rotation in the constant direction and effects of the noise reduction will not be obtainable from repeatedly receiving the segments to take the average values in time, and the communication reliability cannot be improved. However, if the correlation value is "1" or less, the repeated transmission of the segment will generate a phase difference in plus and minus directions. Therefore, if the average value is taken, the difference will be counterbalanced and the communication reliability will be improved. The above

explanation is provided when a plurality of segments is received and the average value of the segments is obtained to correct the error rate. However, other error correction techniques such as the maximum electric power selected method, can be utilized for error correction based on the nature that the noise correlation.

The rule under 35 U.S.C. §102 is well settled that anticipation requires that each and every element of the claimed invention be disclosed in a single prior art reference. In re Paulsen, 30 F.3d 1475, 31 USPQ2d 1671 (Fed. Cir. 1994); In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990). Those elements must either be inherent or disclosed expressly and must be arranged as in the claim. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989); Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 7 USPQ2d 1057 (Fed. Cir. 1988); Verdegall Bros., Inc. v. Union Oil Co., 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1987). The corollary of that rule is that absence from the reference of any claimed element negates anticipation. Kloster Speedsteel AB v. Crucible Inc., 793 F.2d 1565, 230 USPQ2d 81 (Fed. Cir. 1986).

The burden of establishing a basis for denying patentability of a claimed invention rests upon the Examiner. The limitations required by the claims cannot be ignored. See In re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). All claim limitations, including those which are functional, must be considered. See In re Oelrich, 666 F.2d 578, 212 USPQ 323 (CCPA 1981). Hence, all words in a claim must be considered in deciding the patentability of that claim against the prior art. Each word in a claim must be given its proper meaning, as construed by a person skilled in the art. Where required to determine the scope of a recited term, the

disclosure may be used. See In re Barr, 444 F.2d 588, 170 USPQ 330 (CCPA 1971).

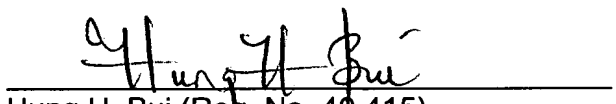
In the present situation, Ho '785 fails to disclose and suggest key features of Applicants' base claims 1 and 4. Therefore, Applicants respectfully request that the rejection of claims 1 and 4 be withdrawn.

In view of the foregoing amendments, arguments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is requested to telephone Applicants' attorney at the Washington DC area office at (703) 312-6600.

To the extent necessary, Applicants petition for an extension of time under 37 CFR §1.136. Please charge any shortage of fees due in connection with the filing of this paper, including extension of time fees, to the Deposit Account of Antonelli, Terry, Stout & Kraus, No. 01-2135 (Application No. 566.39297X00), and please credit any excess fees to said deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

By 
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